PERSONNEL QUALIFICATIONS FOR MEDICARE PERSONNEL

A Report to the
Congress

Department of Health, Education, and Welfare
Wilbur J. Cohen, Secretary
December 1968

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE
WASHINGTON

December 28, 1968

Honorable Russell B. Long
Chairman, Committee on Finance
Senate, Washington, D. C.

Dear Mr. Chairman:

I have the honor to submit a report, related to the Medicare program, on the "Personnel Qualifications Study." This report is made in compliance with the request of your committee in its report to accompany H.R. 12080, Social Security Amendments of 1967 (90th Congress, 1st sess., S. Report No. 744).

The Committee's request was set forth in the following terms:

> Pursuant to present law, the Secretary of Health, Education, and Welfare establishes various health and safety criteria as conditions for the participation of providers of services and independent laboratories in the medicare program. In setting these standards, it was necessary to establish criteria for judging the professional competency and the qualifications of key professional personnel in these health facilities. Membership in or registration or certification by certain specialty or professional organizations is the principal accepted means of establishing professional qualifications in health fields. Medicare regulations go beyond these usual tests of qualifications by providing that individuals meeting alternative training and experience requirements may be found to be qualified personnel.
>
> While the committee agrees that the Secretary's health and safety requirements are intended to safeguard the welfare of patients, it is concerned that the reliance placed on specific formal education, training, or membership in private professional organizations might sometimes serve to disqualify people whose work experience and training may make them equally or better qualified than those who meet the existing requirements. Failure to make possible the fullest use of properly trained health personnel is of particular concern because of the shortage of skilled health personnel in several fields.

> While the committee recognizes the difficulties involved in determining the qualifications of persons in some of these health professions, it also believes and expects that the Secretary should engage in consultation with appropriate professional health organizations and State health agencies and, to the extent feasible, explore, develop, and apply appropriate means of determining the proficiency of health personnel disqualified under the present regulations. Moreover, the Secretary should encourage and assist programs designed to upgrade the capabilities of those who are not now sufficiently skilled to qualify in health occupations now in short supply, but who could perform adequately with relatively little additional training.

The quality of personnel needed to provide health services under the Medicare program is of the utmost importance. Shortages exist in virtually every category. The national interest requires that we make the best use of all personnel and, at the same time, assure standards of quality to provide the best health care for all our aged.

Under this study, we selected five major categories of health services personnel. Although the problems and issues are somewhat different for each of the categories included within the scope of the study, its purpose was to determine if the personnel qualifications of the current Medicare regulations prevent the rendering of specific services under Medicare by any health personnel who may be competent to provide such services. These personnel are not excluded from functioning in the program under current regulations, but they must function under supervision--which constitutes the crux of the problem. The presently disqualified personnel seek to be recognized as qualified and to be permitted to participate in the Medicare program under a minimum of supervision on the same basis as their qualified counterparts. The disqualified groups state that experience should be considered a legitimate substitute for formal education, implying that it is possible to equate the two. The study evaluates the feasibility of recommending alternative mechanisms (other than those included in the Medicare regulations) for determining personnel qualifications.

In summary, the conclusions resulting from the study are:

> Physical therapists. In the light of the shortage of physical therapists, efforts should be made to qualify currently disqualified physical therapists for participation under Medicare if they can establish an adequate level of competency. Administrative steps are being taken to develop a proficiency examination which will make this determination possible.

Licensed practical nurse. The charge nurse in an extended care facility is responsible for the total nursing care of all patients during her tour of duty. Because practical nurses licensed by waiver have no standard educational preparation--and often no such preparation at all--the study did not find it appropriate for them to serve as charge nurses, although they may be employed by extended care facilities for general duty nursing. Thus, no change in current requirements will be made. Suggestions are made in the study for actions by State licensing programs and educational institutions, with a view to upgrading waivered practical nurses.

Independent laboratory personnel. In view of the potentially crucial value of each laboratory determination made, and the growing complexity of laboratory procedures, it is essential that only well-qualified personnel be entrusted the task of performing laboratory analyses in Medicare-approved laboratories. The study concluded that the current regulations represent the minimal acceptable level of standards to assure safe laboratory performance, and that no change should be made.

Medical record personnel. In light of the acute shortages of medical record personnel, Medicare regulations will be modified to permit accredited record technicians, as well as registered record librarians, to function as hospital medical record department heads under specified conditions.

Corrective therapists. These therapists are not licensed by any State, and their educational programs are not accredited by a specialty accrediting body recognized by the Office of Education or the National Commission on Accrediting. In view of this, the study found that the present Medicare regulations, which require that corrective therapists function under appropriate supervision, should not be changed.

I concur with these conclusions and have directed the Commissioner of the Social Security Administration to prepare the necessary changes in the regulations and to take whatever administrative actions are needed to achieve the objectives.

Sincerely,

Wilbur J. Cohen
Secretary

Enclosure

CONTENTS

INTRODUCTION

Nature and Purpose of Study

Title XVIII of the Social Security Act authorizes the Secretary of Health, Education, and Welfare to set standards necessary to protect the health and safety of patients for whom services are provided under Medicare. Accordingly, the conditions of participation for the various types of providers of services were formulated. These list the specific requirements to be met by hospitals, extended care facilities, home health agencies, independent laboratories, and other providers of services in order to be certified for participation in the program. The requirements include qualifications for selected categories of personnel functioning within each of the provider settings.

The Congressional directive for the Personnel Qualifications Study is contained in the Senate Finance Committee's report on the Social Security Amendments of 1967. The committee expressed a concern " . . . that the reliance placed on specific formal education, training, or membership in private professional organizations might sometimes serve to disqualify people whose work experience and training may make them equally or better qualified than those who meet the

existing requirements. Failure to make possible the fullest use of properly trained health personnel is of particular concern because of the shortage of skilled health personnel in several fields."

Although the problems and issues are somewhat different for each of the categories of personnel included within the scope of this study, its purpose was to determine if the personnel qualifications of the current Medicare regulations prevent the rendering of specific services under Medicare by any health personnel who may be competent to provide such services. These personnel are not excluded from functioning in the program under current regulations, but they must function under supervision--which constitutes the crux of the problem. The presently disqualified personnel seek to be recognized as qualified and to be permitted to participate in the Medicare program under a minimum of supervision on the same basis as their qualified counterparts. The disqualified groups state that experience should be considered a legitimate substitute for formal education, implying that it is possible to equate the two. The study evaluates the feasibility of recommending alternative mechanisms (other than those included in the Medicare regulations) for determining personnel qualifications.

The selection of the various categories of personnel to be included in the scope of the study was based on staff

knowledge of complaints and problems that had arisen in connection with operation of the Medicare program. Categories of personnel selected for study were licensed practical nurses serving as charge nurses in extended care facilities, medical record librarians, physical therapists, corrective therapists, and personnel who function in independent laboratory settings.

Study Procedure

The Community Health Service, Health Services and Mental Health Administration, PHS, had primary responsibility for the staff work, supplemented by staff of the Bureau of Health Insurance, SSA. The Bureau of Health Professions Education and Manpower Training, National Institutes of Health, PHS, assisted in the development of information on manpower and training programs for upgrading.

Pertinent information and statistical data were obtained by means of a questionnaire directed to the organizations that directly represent disqualified personnel, to ogranizations representing qualified personnel, and to several organizations representing personnel closely related to those under study.

In addition, consultation was sought from representatives of State and Federal Governmental agencies with a concern for education, employment, or standard setting for the subject groups; from providers of service (as defined in Medicare); and from private educational and professional standard-setting and accrediting groups.

The consultants were grouped into four multidisciplinary expert review panels--independent laboratory personnel, licensed practical nurses, medical record librarians, and physical and corrective therapists.

Early in the development of the study methodology, it was determined that the interests of objectivity would be better served if the professional organizations of the personnel studied were not formally represented on the review panels. Consequently, none of the panel members chosen represented the direct interests of any professional organization; they were selected as individuals who had particular contributions to make as advisors. The expert review panels discussed the issues involved, heard presentations from professional organizations representing both qualified and disqualified personnel, and made recommendations to the staff.

Throughout the study, all advice received was evaluated in the light of protecting the health and safety of Medicare beneficiaries. A further factor given consideration was Medicare's responsibility for promoting the most effective use of competent health personnel, particularly in view of the recognized shortage of skilled health manpower.

Issues

In exploring the proficiency of health personnel currently deemed disqualified for participation in the program, a number of

factors were identified that were common to all the disciplines studied. Nevertheless, specific problems and issues associated with each of the disciplines were different and required separate treatment and levels of priority. This is explained in part by the functions and responsibilities of each discipline. Such disciplines as practical nursing, physical therapy, and corrective therapy render direct patient care. Clinical laboratory personnel, although not involved directly in patient care, produce test results that are used by the physician in diagnosis, which leads to treatment, and in evaluating or monitoring therapy. Medical record personnel, however, are not involved directly in patient care nor in producing test results that are used in patient care.

Chapter I

PHYSICAL THERAPISTS

Present Participation of Physical Therapists

Physical therapy services in Medicare-approved institutions and agencies must be given by or under the supervision of a qualified physical therapist. Medicare conditions of participation for provider institutions and agencies define a qualified physical therapist as a graduate of an educational program in physical therapy that is approved by the Council on Medical Education of the American Medical Association (AMA) in collaboration with the American Physical Therapy Association (APTA), or the equivalent.

An approved program can be any of three types: a 4-year baccalaureate degree program, a 12-to-16-month postbaccalaureate program leading to a certificate of proficiency, or a post-baccalaureate program leading to a master's degree. The recommended curriculum calls for instruction in anatomy, physiology, pathology, psychology, clinical medicine, physical therapy procedures (including tests and measurements, therapeutic exercise and assistive devices, and physical agents), and supervised clinical experience in the care of patients.

The Problem

Many licensed physical therapists who are educationally not qualified to give service under Medicare without supervision report having practiced for many years, some in institutional settings but most in their own offices. They believe that they are qualified to participate as supervisors and consultants under Medicare and have requested permission to do so.

The Practice of Physical Therapy

Physical therapists treat patients who have disabilities resulting from accidents, congenital defects, or illnesses. Under prescription of a physician they evaluate the capabilities of patients by various physical tests; treat patients by using agents such as heat, cold, massage, and therapeutic exercise; and teach patients and their families appropriate home treatment and care as well as exercises, activities, and use of devices--all with the aim of achieving the greatest possible restoration of functions.

The usual practice is for the physician, bearing ultimate responsibility for the patient, to make a diagnosis, determine the objective to be achieved by physical therapy, and order the therapist's services. However, the physical therapist then

determines the specific modalities or treatment mechanisms, and plans the treatment program, in accordance with the overall goals to be attained. Initial consultation between physician and therapist as well as periodic feedback and progress reports are implied essentials in this interaction. The physical therapist must be able to make independent observations concerning the patient's progress or lack of progress, special problems, the need for change in modalities, etc., and report back to the physician.

In view of the wide latitude of judgment that physical therapists must be prepared to exercise in assisting the physician in patient evaluation and treatment, the Medicare program has required that they be fully qualified by formal education and supervised experience.

Positions of Professional Organizations

Data were submitted to the study by the American Physical Therapy Association, whose members are fully qualified for Medicare participation; the National Association of Physical Therapists, Inc., which represents a portion of the disqualified group; the California Physical Therapists Association, and the Massachusetts Society of Registered Physical Therapists. The latter two organizations, whose members also are disqualified, are not affiliated with either national organization.

The organizations of the disqualified physical therapists believe that they should be considered qualified because they meet their States' legal requirements for practice and because referring physicians are satisfied with the quality of their services.

Licensure of Physical Therapists

Physical therapists are licensed in all States and other jurisdictions except Missouri and Texas. Forty of the States have laws that control practice by mandatory licensure. In the other States, licensure is not mandatory and serves only to protect the title of the licensed or registered physical therapist.

All State licensing laws specify professional qualifications in physical therapy, 22 States requiring graduation from an AMA-APTA-approved physical therapy program, which is the requirement under Medicare. Almost all the other States, while reserving the States' right to approve qualifying educational programs, specify by regulation that the program be AMA-APTA-approved. Thus, physical therapists entering the field today generally will comply with the Medicare requirements, although several States have, in recent years, reopened the "grandfather"* approach to licensure.

Most of the disqualified physical therapists were licensed through a grandfather clause which waived educational

*A "grandfather" clause in a statute waives some or all of the requirements of the law to permit persons in practice at the time the law is effected to continue to practice, and includes a cutoff date after which all new practitioners must meet all the legal requirements.

qualifications; others were licensed under State regulations that require some validation of qualifications but do not require an AMA-APTA-approved school.

Manpower

Precise data are not available on numbers of physical therapists qualified to provide services under Medicare. However, review of membership of the APTA indicates more than 10,000 Medicare-qualified active physical therapists, and about 2,000 "inactive" members, some of whom reportedly work part-time. Ninety-five percent of the active members are employed full-time or part-time in health care settings, more than half of them in hospitals. More than one-third of the APTA membership are in the States of California, New York, and Pennsylvania; more than one-sixth are in Illinois, Massachusetts, New Jersey, and Ohio. About one-third are under 30 years of age.

Reports from the organizations of disqualified physical therapists indicate that they total about 3,500, with about half of that number in California, Massachusetts, New Jersey, and New York, and the rest distributed throughout the other States. No more than one-third of them have the baccalaureate degree that is necessary to be eligible for training in an approved certificate program; of the rest, many do not have the basic education that would qualify them for college admission if they wished to enter an approved baccalaureate program.

Most of the disqualified physical therapists are age 45 and older. They state that they have family responsibilities and cannot afford to interrupt their practices to return to school.

Conclusions

Extended care facilities and home health agencies have reported difficulties in obtaining the services of physical therapists. In some cases this has resulted in inconvenience to patients because physical therapists have had to offer their services to these institutions and agencies late at night after their regular working hours.

In light of the shortage of physical therapists, efforts should be made to qualify currently disqualified physical therapists for participation under Medicare if they can establish an adequate level of competency. Several alternative changes in Medicare requirements of physical therapists were considered as possible means of including the services of presently disqualified therapists. Among alternatives were State licensure as the sole measure of qualifications, or providing an alternative to education based on a specified number of years of experience, or use of the "access" mechanism that is applied to facilities in the Medicare program.

These were rejected because it is believed that they would significantly lower standards that were established to protect the health and safety of Medicare patients.

It has been concluded, however, that health and safety can be protected if a two-part proficiency examination is given to evaluate the judgment and skills of currently disqualified physical therapists. The examination proposed would include (1) a written test based upon a "case method" approach and constituting a test of knowledge and judgment, and (2) an observation period during which the therapist's practice could be evaluated in a clinical setting by qualified personnel. This proposal would not provide for interim inclusion of disqualified physical therapists; it would admit them to the Medicare program only after passing the examination.

Administrative steps already have been taken by the Public Health Service and the Social Security Administration to have adopted as policy under Medicare the approach recommended to qualify currently disqualified physical therapists for participation in the program. The proposed proficiency examination will be developed as rapidly as possible.

Chapter II

LICENSED PRACTICAL NURSES

Present Participation of Licensed Practical Nurses

Throughout the development of conditions of participation for extended care facilities under Medicare, a great deal of consideration was given to establishing standards for nursing services. Numerous consultants, both within and without the Federal Government, and including nurses, physicians, health care administrators, and others knowledgeable about patient care, contributed advice and guidance to those responsible for developing the standards for the charge nurse in extended care facilities. Their principal concern was to assure, as nearly as standards can assure, a safe level of patient care to beneficiaries. This was considered particularly important in extended care facilities, which usually have no house physicians. In these facilities, charge nurses must be prepared to deal with all aspects of patient care, including taking initial action when special problems or medical emergencies arise.

Statutory requirements for extended care facilities in the Medicare program can be met by the full-time employment of only one registered professional nurse. In view of this, and of the shortages of nurses, it was decided that a licensed practical nurse

who has graduated from a State-approved school has the minimal level of training required to function safely as the one in charge of nursing activities during tours of duty when staffing is at the lowest in numbers (evening and night shifts).

The Problem

Many objections to the charge-nurse standard for extended care facilities have been made to Congress as well as directly to the Medicare program by individual practical nurses licensed by waiver, the National Association of Practical Nurse Education and Service, Inc., the American Nursing Home Association, some State nursing home associations, and individual nursing home administrators. In general, complaints have stated that the present regulation has threatened the licenses and employment status of practical nurses licensed by waiver in hospitals, extended care facilities, and nursing homes.

Practical nurses licensed by waiver have no standard educational preparation. It is the educational requirement that is waived when a license is obtained by waiver. Moreover, methods of determining on-the-job experience of practical nurses applying for license by waiver vary considerably from State to State, as does the waiver period during which individuals working as nurse aides, etc., may apply for a license under a grandfather clause.

In clarification of the misunderstandings inherent in these complaints concerning the Medicare charge-nurse standard, it should be stated that the standard has no effect on licensure status of waivered nurses. The standard does not preclude employment of practical nurses licensed by waiver for general duty nursing by extended care facilities; it does preclude their functioning in a position in charge of all nursing activities during a shift.

Charge-Nurse Responsibilities

The charge nurse is responsible for the total nursing care of patients during her tour of duty. This means that she is required to exercise varying degrees of independent judgment because of the complex nursing problems presented by many extended care facility patients. Moreover, extended care facilities usually have no house physicians who can be responsible for evaluating sudden changes in a patient's condition and for dealing with emergencies. Hence, the charge nurse must be prepared to recognize significant changes in the conditions of patients and to take initial action in connection with any special problems or medical emergencies that arise. The practical nurse licensed by waiver lacks the indepth knowledge that would permit her to safely assume such responsibilities.

Positions of Professional Organizations

With the exception of one national association of practical nurses whose membership is largely those licensed by waiver, the national professional organizations of nursing personnel, both registered nurses and practical nurses, are of the opinion that the practical nurse licensed by waiver does not have the level of training required to function safely as a charge nurse.

Licensure of Practical Nurses

During the years 1949-1964, a total of 338,783 first-time licenses were issued to practical nurses in the United States. Of these, 119,317 obtained their licenses by waiver, i.e., without having graduated from a State-approved school of practical nursing or without meeting any other standard educational requirement.

In 1967, 23 States and jurisdictions had a permissive licensing law, which protects the title "licensed practical nurse" but does not define the practice of practical nursing nor prohibit unlicensed persons from practice. In the other States, the law is compulsory, regulating practice. There is currently a trend in the States with permissive licensing to make it mandatory and to require training in a State-approved school.

Manpower

The number of practical nurses licensed by waiver who served as charge nurses in extended care facilities before Medicare is unknown and, judging from the experience of the Public Health Service in attempting to determine accurate figures, a reliable estimate would have been impossible except by a door-to-door survey of each institution. Despite the number of complaints received about the charge-nurse standard, which would seem to indicate that many extended care facilities had practical nurses licensed by waiver serving in this position, only 254 extended care facilities, when initially certified for participation in the Medicare program, had to be certified conditionally because they did not have qualified charge nurses. When these conditional certifications were withdrawn in April 1968, only 17 had to be terminated for failing to qualify. The others either had managed to employ charge nurses who were fully qualified to participate under Medicare, or had voluntarily terminated their Medicare agreement because of inability to comply. There were, of course, other facilities that could not be certified even conditionally because they had many deficiencies generally, including nursing deficiencies, representing an overall low standard of care.

Conclusions

Following study of all available data concerning the functions, responsibilities, and qualifications of the charge nurse in a Medicare-certified extended care facility, it is concluded that the standard is minimal and should not be lowered. Therefore, no change is recommended in the Medicare conditions of participation for extended care facilities as related to the qualification of the charge nurse.

Because of the shortages in nursing personnel nationally, consideration has been given to ways and means of qualifying the practical nurses licensed by waiver for charge-nurse positions. Although the majority of these practical nurses are in the older age group and may not be interested in or able to take advantage of additional education, States are urged to establish one of two mechanisms to accommodate those who wish to upgrade their qualifications:

> Initial consideration should be given by States to work with established 12-to-15-month State-approved programs on the possibility of granting these practical nurses individualized advanced standing. This mechanism would give recognition to knowledge gained through experience, thus allowing the practical nurse

licensed by waiver to complete the program in less time than is ordinarily required. At the same time, use of established programs would eliminate the need to develop new programs which must face the complicating factors of shortages of funds, teaching personnel, and educational facilities.

An alternative mechanism, if the above is not possible, is for States to work with educational institutions to develop special training programs designed only for the practical nurse licensed by waiver, which would allow credit for on-the-job experience and provide for completion of the program in less time than is required to present State-approved programs. Such programs should be formulated in consultation with State nurse-licensing agencies that will have to certify the practical nurse who completes the shorter program as the equivalent of a graduate from a presently State-approved program.

It is the responsibility of the States to establish procedures and develop training programs whereby the presently disqualified licensed practical nurse can upgrade her qualifications to meet

those of the charge nurse in an extended care facility under Medicare. Federal participation is limited to assistance in funding such programs. A recent example of such Federal participation is the program in Massachusetts to upgrade practical nurses licensed by waiver, which was funded through provisions of the Manpower Development and Training Act, Title II, and administered jointly by the Office of Education, HEW, and the Manpower Administration of the Department of Labor.

Chapter III

INDEPENDENT LABORATORY PERSONNEL

Present Requirements for Independent Laboratory Personnel

In recognition of the crucial importance of clinical laboratory tests to the health and welfare of the patient, and after considerable consultation and consideration, the conditions for coverage of services of independent laboratories were developed. An independent laboratory performing diagnostic tests is, by Medicare definition, " . . . one which is independent both of the attending or consulting physician's office and of a hospital which meets the conditions of participation in the program."

The regulations for independent laboratories include minimum standards that must be met by the laboratories so that they may be reimbursed for services rendered to Medicare beneficiaries. Standards are applied to laboratory personnel by category (director, supervisor, technologist, and technician) as well as specifically for the immediate supervision of tests performed in the various laboratory specialties and subspecialties. This study was concerned with the director and the technologist.

The personnel qualifications for both the director and the technologist require an inverse ratio of education to experience;

that is, the less education an individual has, the more pertinent experience he must possess. In recognition of equivalent experience, grandfather clauses were included for both categories of personnel in the Medicare regulations. However, after 1971, all individuals who wish to enter the program will have to meet the formal educational requirements, and experience will no longer be a substitute.

The Problem

Few independent laboratory directors or technologists have been affected directly by the current Medicare regulations. Those individuals who do not meet the formal educational requirements as established in the regulations may, nevertheless, render services in the program if they possess the requisite number of years of experience prior to July 1, 1966 (the effective date of Medicare).

However, concern has been expressed by some of the organizations representing laboratory personnel that after June 30, 1971, when no new grandfather directors or technologists will be approved to render services in the program, hardship may be experienced by such personnel as well as by beneficiaries. Accordingly, they contend that the current Medicare independent laboratory regulations are unduly stringent in this respect.

Responsibilities of Laboratory Personnel

Physicians today place greater reliance on clinical laboratory results than ever before. Batteries of tests are requested as part of the diagnostic evaluation of patients in private practice, outpatient clinics, and hospitals. Laboratory analyses serve as an essential adjunct to proper patient evaluation and care. Tests are used to aid the physician in making diagnoses and judging the efficacy of treatment. Some of the powerful modern drugs (e.g., anticoagulants) can be administered only under careful supervision based on frequent laboratory testing. Because the results of laboratory analyses so often serve as the principal indicators of the patient's condition, the need for a high degree of accuracy is apparent. Inaccurate determination can lead to faulty diagnoses or inappropriate treatment, with the possible sequelae of protracted illness, extended convalescence, or even death.

Positions of Professional Organizations

On Director Qualification

Data and testimony were submitted to the study by the American Association of Bioanalysts (AAB), which represents approximately 550 clinical laboratory directors, all of whom are

now qualified under Medicare. However, after June 30, 1971, new nondoctoral members of the AAB who have not hitherto qualified as directors under Medicare will no longer be eligible to render services in a Medicare-approved independent laboratory, which is the main issue raised by AAB.

Although the association has stated that the ultimate objective for directorship of a laboratory should be education at the doctoral level, because of manpower limitations it believes that the 1971 cutoff date is unrealistic. Accordingly, the association has proposed that the date after which a newly certified director must possess an earned doctoral degree be advanced beyond June 30, 1971, and that, for the interim, the master's degree suffice.

On Technologist Qualification

Data and testimony also were submitted to the study by the American Society of Medical Technologists (ASMT), the American Medical Technologists (AMT), and the International Society of Clinical Laboratory Technologists (ISCLT).

The ASMT represents and maintains a registry for technologists who are baccalaureate graduates of 783 schools of medical technology approved by the Council on Medical Education of the

American Medical Association. All members of ASMT or other graduates of these schools are presently qualified under Medicare. It should be noted that AMA accreditation is the only accreditation program for schools of medical technology recognized by the National Commission on Accrediting.

The ASMT expresses full agreement with the current Medicare regulations for independent laboratories and strongly opposes any revisions that would have the effect of lowering the standards for technologists and technicians. It is the position of the ASMT that the education and training of the person who actually performs laboratory tests are the most important ingredients in assuring quality laboratory service. The ASMT views the current Medicare regulations as being the minimal acceptable standards to provide this assurance of quality performance.

The AMT and the ISCLT also operate accrediting programs for schools of medical technology. At present, the AMT accredits 11 schools, and the ISCLT accredits four. Most of these schools are proprietary. However, neither organization is sponsored by or affiliated with any organized medical group nor recognized by the National Commission on Accrediting.* In addition, these organizations

*The Office of Education, HEW, recognizes accrediting agencies and cooperates with the National Commission on Accrediting which is a nongovernmental federation of seven associations representing over 1,300 colleges and universities. It represents higher education in matters relating to accreditation of colleges and universities and programs of study in such institutions. It does not accredit institutions; rather, its major function is to recommend to member institutions those accrediting bodies that it considers worthy of recognition.

grant registration as a technologist to high school graduates with specified experience and/or commercial school or other training, and satisfactory performance in an examination. Because of the grandfather clause in the Medicare regulations, few of the members of these organizations are currently ineligible to render services under the program. However, the prospect is that after 1971 many of the new members of these organizations (i.e., recent graduates of schools accredited by these organizations) would not be eligible to perform tests in independent laboratories participating in Medicare because of their failure to comply with the formal educational requirements specified in the regulations.

The AMT and the ISCLT base their objections to the present regulations upon the contention that educational attainment does not guarantee individual qualifications and has little to do with performance in the laboratory. Demonstrated ability rather than the level of educational achievement, they state, should be the accepted criterion for determining qualifications.

The AMT and ISCLT appear to be most concerned that the present Medicare regulations do not permit vertical mobility from the technician to the technologist level except by means of additional formal education and training. It is their belief that a career ladder should be established to enable a technician to advance to the technologist level through demonstrated ability and

on-the-job experience and not necessarily through academic training. Both organizations further agree that the regulations should be amended to accord recognition as a technologist to graduates of vocational schools or Armed Forces laboratory schools after an appropriate number of years of experience.

Licensure of Clinical Laboratory Personnel

At the beginning of the Medicare program, very few States licensed either laboratories or laboratory personnel. Currently 14 States, New York City, and Puerto Rico have effective licensing programs either for one or more types of personnel employed in a clinical laboratory, or for laboratories,in which case regulations covering personnel qualifications are included. Laboratory legislation has been reported to be under consideration in several other States. The Clinical Laboratories Improvement Act of 1967, which will become effective in early 1969, provides for Federal licensure of clinical laboratories (hospital and independent) that are engaged in interstate commerce. This licensure program includes qualifications for laboratory personnel which closely parallel those of Medicare.

Because so few States have applicable laboratory licensure, the nationally applied independent laboratory regulations of

Medicare have been acknowledged generally to have played an important role in laboratory performance. Until many more States enact licensure programs for clinical laboratories, the Medicare standards along with the Federal licensure regulations (which are largely adapted from Medicare) will continue to fill an unfortunate void.

With respect to licensure, AMT and ISCLT have adopted different viewpoints: The ISCLT recommends that personnel at the technologist and technician levels be licensed inasmuch as they are the personnel who actually perform the work in the laboratory. The AMT, on the other hand, contends that licensure for personnel other than directors and supervisors is not necessary to assure quality.

Manpower

Director

As of December 1, 1968, 2,600 independent clinical laboratories were certified for Medicare participation. Of these, approximately 64 percent were directed by individuals at the doctoral level (Ph.D., M.D., or D.O.), 24 percent by directors with a bachelor's or master's degree, and 12 percent by individuals lacking a college degree.

Various surveys indicate that a significant amount of laboratory services in the nation is rendered in the offices of privately practicing physicians, generally for their own patients. For example, a recent survey of its membership by the American Society of Internal Medicine revealed that 58 percent of the approximately 5,000 responding internists reported that most of their laboratory work is performed in their offices. In 1966, the American Academy of General Practice reported that 97 percent of its 25,614 members do some laboratory procedures in their offices.

It is impossible to draw conclusions from present information as to the true availability of clinical laboratory services. Furthermore, the decided trends toward automated laboratories capable of rendering a high volume of services, and toward centralization and consolidation of laboratories, may affect the number of doctoral-level laboratory directors needed in the future.

Technologist

As of September 1968, 56,800 technologists in various specialty categories were registered by ASMT. The AMT has a membership of approximately 10,000 technologists and technicians,

and the ISCLT has a membership of approximately 3,000 similar personnel.

Conclusions

Present Medicare regulations for independent laboratories have been examined and found not to be creating any hardships for beneficiaries. The program has not identified any problems in the delivery of laboratory services. In view of the potentially crucial value of each laboratory determination made, and the growing complexity of laboratory procedures, it is essential that only well qualified personnel be entrusted the task of performing laboratory analyses in Medicare-approved laboratories. It is concluded that the current regulations for laboratory personnel represent the minimal acceptable level of standards to assure safe laboratory performance. Thus, no change should be made in the present qualifications as specified in the conditions for coverage of services of independent laboratories under Medicare.

It is recognized, however, that a concerted effort by the Federal Government is necessary to promote and develop national programs of continuing education within educational settings that will facilitate vertical career mobility in the clinical laboratory field. The study pointed out the need for adequate job

descriptions for clinical laboratory personnel, to be developed through a total systems study of the tasks performed in a clinical laboratory and analysis of the education and training needed to perform those tasks. The Department of Labor and the PHS Bureau of Health Professions Education and Manpower Training, are developing a technique for performing task analysis which may have application to laboratory personnel.

Chapter IV

MEDICAL RECORD LIBRARIANS

Present Participation of Medical Record Librarians

Medicare conditions of participation for hospitals state that the person who supervises and conducts the medical record department preferably should be a registered record librarian. However, if such a professionally trained person is not available on a full-time basis, the hospital is required to arrange for a qualified consultant or trained part-time medical record librarian who is responsible for organizing the department, training personnel, and periodically evaluating the records and the operation of the department. The phrase "qualified consultant or trained part-time medical record librarian" also means a registered record librarian.

Two Categories of Personnel: RRLs and ARTs

Medical record personnel have four major responsibilities: (1) to assure that the institution has complete records on patients, including appropriate reports from attending and consulting physicians, pathologists, nurses, and other professional staff members; (2) to design and maintain a filing system

capable of making these records immediately available; (3) to release information from the files to authorized personnel; and (4) to analyze the records and compile statistics. Medical record personnel do not have direct patient care responsibilities.

The registered record librarian receives the title of RRL on passing a qualifying examination administered by the American Association of Medical Record Librarians (AAMRL). She must have graduated from a medical record library science course accredited by the American Medical Association (AMA) in its collaborative program with AAMRL. Until 1965, a medical record librarian could take the AAMRL examination on the basis of experience only. The accredited record technician also is trained in an AMA-AAMRL-accredited program, and receives the designation ART on passing a qualifying examination conducted by AAMRL.

The RRL functions at the professional level and is regarded as the individual who, because of a greater degree of formal education and experience, specializes in the planning and evaluation of health record systems. The ART does not have indepth training in the techniques of organization and management. This curriculum is directed to the preparation of a technician for specifically prescribed tasks rather than for activities that involve planning or developing innovative approaches to solving problems.

The Problem

Although present Medicare regulations for hospitals do not exclude the ART from employment in participating hospitals, the ART may not function as the head of the hospital's medical record department nor as a consultant to the department. The ART may, however, function in these capacities in an extended care facility, where record-keeping activities are less difficult.

Position of the Organization

In light of the acute shortages of qualified medical record personnel to meet the needs of approximately 7,000 Medicare-certified hospitals, the AAMRL has requested that Medicare regulations permit ARTs whom they have identified as being qualified as consultants to function as consultants to medical record departments in hospitals of less than 100 beds.

Licensure

The AAMRL firmly believes that the association can assure professionally acceptable service through accreditation of educational programs and registration of personnel. It works closely with the American Medical Association (AMA) in the accreditation of schools for both RRLs and ARTs, and with the AMA, American Hospital Association, and American College of Surgeons in monitoring qualifications for attainment of

registration by librarians and accreditation by technicians. The association feels that State licensure would not significantly improve the association's programs; furthermore, that it could even prove restrictive and hinder geographic mobility in an occupation already beset by manpower shortages.

Accreditation and Content of Educational Programs

The AMA's Council on Medical Education collaborates with the AAMRL, through its Committee on Education and Registration, to establish national standards for the education of medical record librarians and technicians, survey and accredit educational programs for both categories of personnel, and publish lists of accredited schools.

The curriculum for the accredited medical record library science school, where the RRL receives training, includes medical terminology, medical record science, fundamentals of medical science, organization and administration, legal concepts for the health fields, data processing systems, and directed practical and laboratory experience. This program is at least 12 months in length and requires a baccalaureate degree.

The accredited ART school curriculum includes theoretical instruction in medical terminology, anatomy and physiology, and medical record science; and practical experience in admission and discharge procedures, machine transcription, statistics, coding and indexing, legal aspects, and secretarial practice. This program may be one of three types, each of which requires high school graduation: a 9-month hospital-based program, a 1-year or 2-year junior college program, or a 25-lesson correspondence course.

Manpower

Accurate figures on numbers of qualified medical record personnel are not available inasmuch as neither registration nor accreditation is mandatory, and many such personnel are employed in health care settings that require neither qualification. The total membership of the AAMRL had reached 7,732 as of July 1968. Of this number, 4,701 were listed as active members, including 3,345 RRLs and 1,356 ARTs. According to the organization, certificates of registration have been issued to 6,009 librarians since 1933, and certificates of accreditation to 2,147 technicians since 1955.

According to a 1966 American Hospital Association-Public Health Service survey of hospitals, 5,065 persons with the title

of medical record librarian were employed in the reporting hospitals which represented 80 percent of the national patient census. Of this number, only 2,383, or 47 percent, were reported as being AAMRL-registered. The same survey indicated that there were 8,159 medical record technicians in these hospitals, 610, or 7.5 percent, of whom were listed as AAMRL-accredited.

The reporting hospitals indicated a present additional need for 1,010 RRLs and 600 ARTs. Estimated totals needed in 1975 are projected at 10,400 RRLs and 15,200 ARTs.

The obvious shortage of medical record personnel has been further aggravated by a substantial annual turnover in employment. The AAMRL estimates that about 50 percent of its members change positions each year. It also is estimated that as many as 500 leave the field each year (primarily because of marriage or increasing family responsibilities).

Also, it must be noted that both medical record librarian and technician schools have been operating at 50 percent capacity for many years. At the completion of the 1967-1968 school year, the 26 AMA-AAMRL-accredited schools for medical record librarians graduated 193 students. The 15 approved medical record technician schools graduated 103 students in 1967-1968. Fifteen new junior

college-based programs will graduate their first classes in 1969 and 1970. Eleven hospital-based technician schools closed since 1960.

The number of medical record librarians writing AAMRL's registration examination has decreased annually for several years, 203 in 1967 and 195 in 1968. However, the number of medical record technicians writing the ART examination is increasing, 556 in 1967 and 667 in 1968, with the great majority graduates of the correspondence course rather than of hospital or school programs.

Conclusions

Policy modifications that have resulted from consideration of the availability, functioning, and qualifications of medical record personnel in Medicare-certified hospitals are as follows:

> The term "qualified" for medical record librarian, whether full-time or part-time, as used in the Medicare conditions of participation for hospitals will be clarified in the regulations, indicating that she is a graduate of an AMA-AAMRL-accredited school or an RRL. This will qualify graduates from accredited schools without either membership in or registration by AAMRL.

> In light of the acute shortages of qualified medical record personnel nationally, an ART will be allowed to function as head of a medical record department if the hospital arranges for regular consultation from a qualified private consultant or if the State Medicare agency provides regular consultation services of a qualified medical record librarian.

AAMRL's suggestion that certain ARTs be allowed to function as consultants to hospitals of less than 100 beds certified for participation in Medicare is rejected. Problems encountered in such hospitals are neither less complex nor less serious than in larger institutions. Organization and management skills directed toward planning and problem solving are necessary prerequisites for the individual who serves as a consultant to small as well as large hospitals.

Chapter V

CORRECTIVE THERAPISTS

Present Participation of Corrective Therapists

Although the term "corrective therapy" is not specifically mentioned in the Medicare law or standards, the cost of corrective therapy services may be included in provider reimbursement under various circumstances. When provided to a hospital patient, corrective therapy is covered if supplied through a rehabilitation department that is directed by a physiatrist or similarly qualified physician. When an extended care facility provides corrective therapy through an organized rehabilitation department with a multidisciplinary approach, the services are covered if the department is supervised by a physician qualified in physical medicine who prescribes the treatment. Corrective therapy services also may be covered in an extended care facility or a home health agency that provides such services under the supervision of a qualified physical therapist, or when the services are provided in a physician's office under the physician's direct supervision and included in his bill. In addition, new coverage for outpatient physical therapy provided by certain qualified organizations, effective July 1, 1968, includes coverage for services by personnel operating under the supervision of a qualified physical therapist.

Excluded from coverage are services provided by corrective therapists who are independent practitioners or who are employed by providers lacking the necessary supervision.

The Problem

The American Corrective Therapy Association (ACTA) has requested that their profession be specifically recognized as a separate discipline in the Medicare law and regulations, with the same status as the other rehabilitation disciplines. Thus, the Association requests the same recognition for its members under the Medicare program as is accorded physical and occupational therapists.

The Practice of Corrective Therapy

Corrective therapy is defined by ACTA as "The application of the principles, tools, techniques, and psychology of medically oriented physical education to assist the physician in the accomplishment of prescribed objectives." According to the ACTA report submitted to the Public Health Service in August 1968, corrective therapy is utilized in prevention, diagnosis, and treatment of disease, including rehabilitation. The report states further that treatment consists of specific and general remedial exercises that may embrace ambulation and elevation techniques, neuromuscular coordination activities, therapeutic hydrogymnastics, and care and utilization of lower extremity prostheses.

Corrective therapists teach self-care activities and orientation for the blind, and operation of motor vehicles adapted for manual control. Providing activities for psychiatric patients is a major duty of corrective therapists in many settings. In educational institutions, practitioners of corrective therapy are known as adapted physical educators, teachers of corrective physical education, and remedial physical educators. Many of the functions of corrective therapists in health settings are similar to, although more limited than, those of physical therapists.

Historical Development and Functions

Corrective therapy emerged during World War II. Dr. Howard Rusk and Major General Norman T. Kirk, Surgeon General of the Army, were largely responsible for establishing physical reconditioning in the Armed Forces. Because there were not enough qualified physical therapists, personnel who had majored in physical education and had experience in group sports activities were chosen to work, under close supervision in a medical setting, with patients (previously healthy young men who had been injured in battle) after acute-phase medical treatment had been completed.

After the war, the Veterans Administration (VA) introduced the use of such personnel in VA hospitals, providing inservice training so

that they could be assigned specific tasks with patients on order of a physician. Many of the currently active corrective therapists received their training in this way.

In October 1946, a group of corrective therapists organized the Association for Physical and Mental Rehabilitation, later called the American Corrective Therapy Association (ACTA). Chief aims of ACTA are to promote use of medically prescribed exercise therapy and adapted physical education, to advance professional standards of education and training in corrective therapy, and to promote research.

In December 1967, the VA employed 500, about 42 percent, of the 1,200 corrective therapists in the United States. As employees of VA hospitals, they function in highly structured settings in departments that are directed by physiatrists and in which physical therapists also function. In such settings it is possible for the physiatrist to select carefully the patients to be assigned to corrective therapists and to physical therapists. Moreover, in such settings the physiatrist gives specific prescriptions for treatment and is available for personal supervision of the therapists' work.

Education and Certification

Traditional undergraduate programs in physical education, which form the basis for preparation of corrective therapists,

place emphasis on physical activity of healthy persons, with the focus on participation in sports or other group activity. There are some courses in these programs called "adapted physical education" or "therapeutic physical education" that have content related to work with the physically and mentally handicapped.

In contrast to this focus, the educational training of other health personnel who provide rehabilitative therapy services to patients includes training in the observation and recognition of any significant changes in a patient's condition that should be reported to the physician. This requires indepth study of such subjects in the natural sciences as anatomy, physiology, and pathology, and the study of psychology with emphasis on psychological dysfunction affecting sick and disabled persons. It also includes didactic clinical courses that cover areas of medicine and surgery concerned with conditions commonly encountered in patients who are treated by therapists.

Such indepth training is not included in the curricula of the schools offering undergraduate programs in adapted physical education. The training of corrective therapists includes specified clinical experience, but the colleges offering corrective therapy do not themselves have facilities for clinical practice programs. However, the ACTA has reported that 44 hospitals and clinics participate in clinical affiliation programs, most of

which are in VA hospital settings. The clinical training is not standardized even within the VA system.

The ACTA examines curricula of colleges and universities offering corrective therapy courses and confers various levels of accreditation according to the degree to which their requirements are met. Neither the National Commission on Accrediting nor the Office of Education of the Department of Health, Education, and Welfare recognizes the ACTA as an accrediting agency.

Among undergraduate programs in adapted physical education, the ACTA lists seven institutions as having acceptable programs, six others as probational, and 30 as tentative. The VA also has granted approval to 61 educational institutions that offer adapted physical education but with no standardized curriculum; seven no longer include adaptive physical education courses in their curricula.

Only one institution is reported by ACTA as approved and meeting all its requirements for full accreditation. This program offers 1 year of graduate study following a baccalaureate program in physical education. During the postgraduate year period, techniques of corrective therapy are stressed and clinical practice is provided through affiliation with a VA hospital and a private clinic. None of the corrective therapy programs is in an approved school of allied health professions.

The certification program for corrective therapists developed by ACTA requires a baccalaureate degree with a major in physical education. At least 240 hours of clinical practice must be completed, with the recommendation being 400 hours.

The VA has the same minimum requirements for a corrective therapist as the ACTA, except to stipulate that the clinical practice must have been obtained in a VA clinical training program or an equivalent training program in a clinical setting under the direction of a physician. The training program must have been developed with an accredited college or university that offers a major in physical education in conjunction with a hospital or rehabilitation center. The VA does not require ACTA certification as a qualification of employment. The training in each hospital is dependent upon the direction given by the physician who is chief of physical medicine and rehabilitation; the training program is not standardized in the VA hospital system.

Licensure

No statutory provisions or regulations have been established in any State for the practice of corrective therapy. ACTA has stated that it will not seek licensure for its members until all the educational programs for corrective therapy comply with its standards.

Traditionally, self-regulation of a profession is accepted when the group collaborates with established, approved accrediting bodies. To date, ACTA has failed to achieve acceptance by a recognized organization. Part of their difficulty may be due to the fact that other professionals with medically oriented backgrounds are specifically trained in greater depth to perform all the activities that are included in corrective therapy. Thus, it would be difficult for either an accrediting body or a State licensing authority to differentiate between corrective therapy and other forms of therapy. Moreover, training in corrective therapy does not prepare the individual so trained to work with some of the modalities commonly used in physical medicine and rehabilitation. For example, corrective therapists are not prepared, as are physical therapists, to utilize such agents as heat and cold, light and electricity. Despite this, some corrective therapists have obtained grandfather licenses as physical therapists.

Manpower

The exact number of personnel providing corrective therapy is difficult to determine inasmuch as there are no statutory or certification requirements for practice. The ACTA estimates that there were 1,200 personnel providing corrective therapy in 1967. Despite the fact that 1,000 have been certified, there are only 710 active members of the Association.

Although the VA employs the greatest number of certified and noncertified corrective therapists, the number of corrective therapists employed in other hospitals, nursing and convalescent homes, rehabilitation centers, extended care facilities, home care programs, physicians' offices, and handicapped children's camps is not known. Forty percent (284) of the ACTA membership are engaged in private practice, with only 11 percent (78) on a full-time basis. Some own and operate their own clinics. The ACTA estimates that 100 new therapists are coming into the discipline each year. Thus, the number of certified corrective therapists available for geriatric care cannot be considered significant.

Needs of the Aged

The prevalence among the elderly of severely debilitating conditions that are amenable to physical rehabilitation has been well established. Corrective therapists, working under adequate supervision, undoubtedly can meet a defined set of patient needs. There is no question that they play a significant role in VA hospitals. However, it is difficult to define for corrective therapy a unique body of theory, knowledge, or techniques. Thus, it cannot be established that corrective therapists offer any service that is not encompassed in the medically oriented training of other personnel, such as physical therapists and nurses who care for patients in a rehabilitative setting; and corrective

therapists do not have the indepth medically oriented preparation that these other health personnel have.

Conclusions

Protection of the health and safety of the elderly is the vital factor in any consideration of the provision of services now covered under Medicare, as well as any additional coverage that might be included in the future. Unlike the VA health services, services under Medicare usually are not offered in a highly structured setting that permits careful selection of patients to be treated by different types of therapists and in which detailed prescriptions and supervision can be given to therapists. Under Medicare, the therapist who, for example, works in an extended care facility or in a home care program must be prepared to offer services for a wide variety of patients and frequently to do so under general rather than specific prescriptions. Moreover, the physician in these settings generally assumes that the therapist is able to use any of the physical modalities that may be prescribed for patients.

The therapist serving Medicare patients in relatively unstructured and nonphysiatrist-directed settings also must be prepared to discern changes in a patient's condition that may indicate the need for a change in therapy that must be reported to the attending

physician. Since deficits were found in both basic and clinical science subject areas in all the corrective therapy curricula reviewed, there is no assurance that corrective therapists can offer acceptable services under Medicare even though they may do so in VA settings.

No changes in Medicare coverage to include corrective therapists by name on parity with other specified therapists would be desirable. Permitting their independent practice and direct billing would compound a potentially hazardous situation. Any change in present coverage that eliminates the need for supervision of corrective therapists by qualified personnel (namely, those with the necessary background in basic medical and clinical sciences) would endanger the health and safety of Medicare beneficiaries.

Chapter VI

PROFICIENCY TESTING AND EDUCATIONAL EQUIVALENCY

To facilitate flexibility in the development and use of health manpower, educational and experience equivalents must be identified and measured wherever possible. Two mechanisms that work toward this end are proficiency testing and educational equivalency. Although both mechanisms are in need of further exploration and refinement, their use as qualifying devices frequently has been suggested for application to persons currently not meeting Medicare personnel requirements.

Proficiency testing, when adequately developed, provides a means of evaluating the competency of persons to practice, especially those whose qualifications have never been validated. It generally is not viewed as being an overall substitute or alternative to recognized educational requirements; rather, as a mechanism for maintaining in practice significant numbers of health workers who may be lacking in formal education but who possess substantial experience. Proficiency testing is still undergoing development and is not yet considered an accurate and reliable measure of competency.

The usual paper-and-pencil test is merely a test of knowledge and does not measure the individual's ability to apply the knowledge in a work situation. Furthermore, such tests are predicated upon the recall of information and have little relevance for those who have learned on the job. Recall examinations for those completing a formalized academic program should be different from a test designed to evaluate on-the-job performance.

Few proficiency tests have been developed for the health occupations. The Professional Examination Service of the American Public Health Association constructed an examination for the U.S. Public Health Service for directors of independent laboratories who did not meet the established educational requirements of Medicare but who were functioning as directors prior to Medicare. This is an examination designed to test an individual's acquired scientific knowledge and should not be confused with the continuing proficiency testing of laboratory work which is part of quality control. Incidentally, of the 650 laboratory directors who have taken the examination, which is being administered until July 1, 1970, thus far, 77 have failed to pass.

The development of a satisfactory proficiency test presumes adequate information concerning the tasks required of a job, and concerning the knowledge necessary to perform these tasks. The Division of Allied Health Manpower, BHPEMT, through its Educational

Program Development Branch, is presently cooperating with the Department of Labor, Occupational Analysis Branch, in the development and application of a technique for conducting task analyses on a number of allied health occupations at the U.S. Public Health Service Hospital in Staten Island, New York. Results of this and related studies should be helpful in delineating specific tasks performed by various health workers. The knowledge gained from this task-analysis activity could be of great assistance in developing standards for proficiency testing.

A relatively new method of constructing a realistic definition of clinical competence closely related to task analysis is the "critical incident technique" first pioneered by the American Institutes for Research. The application of this technique produced the criteria now used as the Part III examination of the National Board of Medical Examiners which purports to measure the level of competence achieved by the medical intern.

The critical incident technique consists of a set of procedures for collecting direct observations of human behavior; i.e., incidents that have special significance and meet systematically defined criteria. An incident is considered to be any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act.

To be critical, an incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer, and where its consequences are sufficiently definite to leave little doubt concerning its effects.

Although the specific applications of the critical incident technique are potentially legion, they can be classed generally into two somewhat related categories--defining the dimensions of behavior, and evaluating human performance. The critical incident technique holds promise as a method of determining the aspects of behavior that are significant for a given task or activity and should form the basis for an efficient program of proficiency testing. The recognition and interpretation of clinical situations and performance can be evaluated through use of motion pictures, still pictures, programed testing, etc. On the surface, therefore, it would appear that there is no reason for limiting the application of this technique to physicians; perhaps it also could be used effectively for allied health professionals.

Equivalency tests are designed to determine whether knowledge acquired outside the traditional educational process is equal to knowledge gained in conventional formal educational programs. Normally, the granting of equivalency credit is done for the purpose of advanced placement in an educational program at the

discretion of the individual educational institution. Moreover, the proof of any educational equivalency examination is its acceptance by educational institutions. The development of an educational equivalency examination that places the individual at his proper level in the educational process gives him an advantage in that it does not require formal coursework equal to previously acquired knowledge.

Despite the difficulties of attempting to equate knowledge gained on-the-job with that obtained in the classroom, some progress has been made in this area. The New York State Department of Education has developed a College Proficiency Examination (CPE) Program which consists of a series of subject examinations, including biology and chemistry, designed to measure knowledge acquired in ways other than through regular classroom attendance. The CPE grade is translated into actual course credit only when accepted by a college for credit toward a degree at that institution. The New York State Department of Education does not grant college credit, and in no case can an individual earn all the credits required for a degree without classroom attendance. The New York State Board of Regents has recommended that no more than half of the credits required for a degree be granted on the basis of examination.

Little has been done in the health occupations, except in nursing, to facilitate educational equivalency. New York State and several other States, as well as individual colleges, have attempted to facilitate the reentry of diploma nursing graduates into baccalaureate programs. Also, at least two other States have developed and conducted accelerated courses for practical nurses licensed by waiver who seek to eliminate their waivered status.

The Educational Testing Service, Princeton, New Jersey, also has developed a series of examinations for a College-Level Examination Program, the results of which may be accepted by individual colleges for credit. It should be pointed out that a number of colleges also conduct examination programs that give credit or advanced standing for knowledge gained off the campus.

It is anticipated that future equivalency testing may be based upon more innovative approaches; e.g., discover what more the student needs to know, rather than attempt to match previous acquired knowledge to specific courses. Such innovative approaches, however, are yet to be fully developed.

Chapter VII

FEDERAL SUPPORT OF TRAINING FOR UPGRADING

Federal financial assistance to education usually takes two forms--support to institutions, and direct and indirect aid to students. Some programs embody both elements, while others include only one.

Several ongoing Federal programs involved in the training of health personnel may have application to the upgrading of health personnel who presently are not qualified under Medicare standards. Although these programs may not have been specifically designed for upgrading purposes, they possess the authority to support such training and may be readily adaptable.

Two grant mechanisms of the Allied Health Professions Personnel Training Act administered by the PHS Bureau of Health Professions Education and Manpower Training--Developmental Grants and Educational Improvement Grants--provide direct aid to educational institutions and could serve as a stimulus to develop upgrading courses. Developmental Grants provide for the initiation of new curricula or for new approaches to training and utilization. For example, a program that developed a sufficiently creative approach to the didactic training of those who have already demonstrated practical

experience could be eligible for a Developmental Grant. The Educational Improvement Grant provides funds to a training center on the basis of a formula related to the number of programs and the number of students enrolled therein. An institution that elected to give advanced standing in an ongoing program to those with prior experience in order to shorten their training period would be able to count such students in computing its formula entitlement.

The Office of Education, HEW, through Title I of the Vocational Education Amendments of 1968, provides allotments to States on a fifty-fifty matching basis to provide basic training at the nonprofessional level. The States administer this funding of instructional costs, teacher training, and ancillary services through State or local boards of education or their designated contractors. These programs may be used to provide basic or supplementary education, including upgrading education at the high school, junior college, or technical institute level.

Title I of the Vocational Education Amendments also authorizes funds for cooperative education for vocational and technical students to help finance their maintenance and education on leave from the job. The Vocational and Technical

Education Program provides funds for vocational and technical students who work part-time.

Under the National Vocational Student Loan Insurance Act of 1965, low cost, guaranteed loans are available for students in approved postsecondary, vocational schools that prepare students for employment at the nonprofessional level.

The Office of Education, HEW, and the Manpower Administration of the Department of Labor jointly administer the provisions of the Manpower Development and Training Act, Title II, which authorizes up to 90 percent Federal payment of instructional costs and allowances to eligible trainees. The Act gives broad authority for basic and supplemental training in professional and nonprofessional occupations. Programs are initiated at the local level by Federal, State, or local agencies, and can provide training for upgrading in the health field. The Massachusetts program to upgrade waivered licensed practical nurses through an accelerated course is funded under this mechanism.

In addition to the portions of the Manpower Development and Training Act (MDTA) jointly administered by the Office of Education, HEW, and the Manpower Administration of the Department of Labor, MDTA also provides funds for on-the-job training of up

to 52 weeks while the employer continues to pay salary. The Labor Department funds instructional costs for on-the-job training through the technical level. MDTA also funds experimental and demonstration projects on-the-job, and at the high school, junior college, and technical institute level.

Several of the authorities under the Higher Education Act can be applied to training for upgrading in health occupations, although not directed specifically at this area. National Defense Student Loans (guaranteed loans to students) and Educational Opportunity Grants for students provide opportunities for student assistance to those receiving training for upgrading at the junior college, technical institute, or baccalaureate level.

The Rehabilitation Services Administration of the Social and Rehabilitation Service (SRS) administers funds to grantee institutions for the support of traineeships in physical therapy. These are basic educational programs in schools approved by the Council on Medical Education of the American Medical Association in collaboration with the American Physical Therapy Association. Several years ago, the SRS partially funded training for upgrading for a group of physical therapists who had graduated from an

unaccredited school in the State of New York (Ithaca College). However, SRS has not funded similar programs since then.

APPENDIX

EXPERT REVIEW PANELS
for
PERSONNEL QUALIFICATIONS STUDY

Independent Laboratory Personnel

Howard Bodily, Ph.D., Chairman
Chief, Division of Laboratories
State of California Department
of Public Health
Berkeley, California

William Christopherson, M.D.
Professor and Chairman
Department of Pathology
University of Louisville
School of Medicine
Louisville, Kentucky

Gerald R. Cooper, M.D.
Chief, Medical Laboratory Section
National Communicable Disease Center
Health Services and Mental
Health Administration, PHS
Atlanta, Georgia

Miss Dallas Johnson
Executive Secretary
National Committee for Careers
in Medical Technology
Bethesda, Maryland

Paul L. Johnson, Ph.D.
Dean
Catonsville Community College
Catonsville, Maryland

Robert Y. Katase, M.D.
Associate Chief for
Laboratory Medicine
Office of Professional Services
Federal Health Programs Service
Health Services and Mental
Health Administration, PHS
Silver Spring, Maryland

Ralph C. Kuhli, MPH
Director, Department of Allied
Medical Professions and Services
American Medical Association
Chicago, Illinois

Sister M. Rosarii, M.T. (ASCP)
Supervisor of Laboratories
Little Company of Mary Hospital
Evergreen Park, Illinois

Charles L. Tanner, M.D.
Medical Consultant
Program Planning and
Development Division
Medical Services Administration, SRS
Washington, D.C.

Marjorie Williams, M.D.
Director, Pathology and
Allied Science Services
Veterans Administration
Washington, D.C.

Medical Record Librarians

Mrs. Helen D. McGuire, Chairman
Director, Division of Long Term Care
Bureau of Professional Services
American Hospital Association
Chicago, Illinois

Mrs. Marian Beckman, R.R.L.
Medical Record Consultant
Licensing of Care Facilities Section
Oregon State Board of Health
Portland, Oregon

Jack H. Engelmohr
Executive Director
Homestead Hospital
Homestead, Pennsylvania

Miss Olive Johnson, R.R.L.
Lecturer, Preventive Medicine
and Public Health
University of California
School of Public Health
Los Angeles, California

Ralph C. Kuhli, MPH
Director, Department of Allied
Medical Professions and Services
American Medical Association
Chicago, Illinois

Miss Carol Lewis, R.R.L.
Chief, Medical Records Branch
Federal Health Programs Service
Health Services and Mental
Health Administration, PHS
Silver Spring, Maryland

John Nash, Ph.D.
Public Health Analyst
Program Management Division
Medical Services Administration, SRS
Washington, D.C.

Licensed Practical Nurses

George M. Warner, M.D., Chairman
Director, Bureau of Long Term Care
New York State Department of Health
Albany, New York

Miss Elsie T. Berdan, R.N.
Chief, Nursing Branch
Office of Professional Services
Federal Health Programs Service
Health Services and Mental
Health Administration, PHS
Silver Spring, Maryland

James Clay
Administrator
Rose Haven Nursing Home
Roseburg, Oregon

Mrs. Agnes McGreevy Hudack, R.N.
Director of Nursing
Sunny Acres Hospital
Cleveland, Ohio

Mrs. Dorothy M. Justice, R.N.
Director, School of Practical Nursing
University of Maryland
School of Nursing
Baltimore, Maryland

Mrs. Avis O'Connor, R.N.
Field Representative
Joint Commission on
Accreditation of Hospitals
Chicago, Illinois

Miss Helen K. Powers, R.N.
Program Officer for Secondary, Post
Secondary, and Health Occupations
Adult Vocational and Library
Programs Branch, OE
Washington, D.C.

Miss Ilse Sandmann, R.N.
Nursing Advisor
Medical Services Administration, SRS
Washington, D.C.

Miss Mildred S. Schmidt, R.N.
Secretary, State Board of
Examiners of Nurses
New York State Department of Education
Albany, New York

Physical Therapists
and Corrective Therapists

Irvin J. Cohen, M.D., Chairman
Executive Vice President
Maimonides Medical Center
Brooklyn, New York

Miss Norma J. Ewan
Chief, Physical Therapy and
Occupational Therapy Branch
Federal Health Programs Service
Health Services and Mental
Health Administration, PHS
Silver Spring, Maryland

Henry L. Feffer, M.D.
Associate Clinical Professor
George Washington University
Medical Center
Washington, D.C.

Paul Fleer
Chief, Patient Care Practices Section
Bureau of Medical Facilities
and Services
Wisconsin State Department of
Health and Social Services
Madison, Wisconsin

Inez Hill, M.D.
Chief, Physical Medicine
and Rehabilitation
Veterans Administration Hospital
Washington, D.C.

Mrs. Geneva R. Johnson
Director of Physical Therapy
Case Western Reserve University
Cleveland, Ohio

Mrs. Florence L. Knowles
Physical Therapy Consultant
Rehabilitation Services Administration, SRS
Washington, D.C.

Ralph C. Kuhli, MPH
Director, Department of Allied
Medical Professions and Services
American Medical Association
Chicago, Illinois

Sidney Robbins
Director of Medical Programs
Planning and Development Division
Medical Services Administration, SRS
Washington, D.C.

GPO 869-207